TECHNICAL INFORMATION ON TRAFFIC FORECASTING

General Process Used in Development of Base Year (1995) Model

See Figure A-1 for the general process used in the development of the base year model.

Base Year Internal Trip Productions

This section discusses how average daily trip productions were estimated for the following categories: (1) trips produced by dwelling units, (2) trips produced by commercially owned heavy trucks, (3) trips produced by commercially owned cars, pick-up trucks, and vans, and (4) NHB Secondary trips.

A dwelling unit survey was performed in which the units were counted on a zonal basis and put into one of the following categories: excellent, above average, average, below average, and poor. The trips produced by dwelling units were computed by multiplying the trip generation rate for each category by the number of dwelling units in each category. The following are the generation rates used: 14.0 for excellent, 12.0 for above average, 10.0 for average, 8.0 for below average, and 6.0 for poor.

The number of commercially owned heavy trucks was determined on a zonal basis by surveying the businesses in each zone. The trips produced were computed by multiplying the number of trucks by 7.0.

The number of commercially owned cars, pick-up trucks, and vans was determined on a zonal basis by surveying the businesses in each zone. The trips produced were computed by multiplying the number of cars, pick-up trucks, and vans by 7.0.

The trips generated by the dwelling units and commercially owned vehicles discussed above are called internally generated trips. Included in the internally generated trips are both trips between internal zones (called internal-internal) and trips made by vehicles garaged inside the planning area but with destinations outside the planning area (called internal-external). Since internal-external trips are included in the external-internal trips, the number of internally generated trips was reduced by 12 percent so that the internal-external trips would not be double counted.

The number of adjusted internally generated trips produced by dwelling units was separated into three purposes: (1) home based work (HBW) trips, (2) home based other (HBO) trips, and (3) non-home based (NHB) trips. 25 percent was allocated to HBW, 51 percent was allocated to HBO, and 24 percent was allocated to NHB. The trips produced by